NOTES ON *HETEROMERA*, AND DESCRIPTIONS OF NEW GENERA AND SPECIES (No. 1).

BY F. BATES.

ARYENIS, mihi, Trans. Ent. Soc., 1868, p. 309.

It was suggested to me by Dr. Le Conte, when going through my collection, that this genus should, by its elongate metasternum and winged condition, be placed with the *Epitragides* of Lacordaire. Dr. Mäklin, in the Stett. ent. Zeit., 1872, p. 247, has also expressed the same opinion, giving as its nearest ally the genus *Sphenaria* of Ménétries. I still think, however, that this genus cannot be removed from the vicinity of *Evaniosomus*, Guérin. The narrow, elongate head, with its supra-orbital carena; the strongly produced epistoma, uniformly continuous with the front; the elongate and very prominent antennary orbits, which are rigidly marked off from the rest of the head by a deep sulcus; the elongate palpi; the prothorax, with its pronotum continuous with its flanks; the elongate, slender tarsi (having the first joint of the two posterior pairs much larger than the last) channelled beneath and ciliate with short, spiniform hairs; are strong characters possessed by this genus in common with *Evaniosomus*. The eyes are certainly much larger, and are approximate beneath. The elongate metasternum and the wings are also exceptional; but even these characters are met half-way in the genus *Chorasmius* (a genus I have proposed—Trans. Ent. Soc., 1868, p. 310, note—to receive *Evaniosomus procerus*, Er.), which has the metasternum nearly double the length, as in *Evaniosomus*, and the wing-cases open (not connate). I possess, moreover, a second species of *Aryenis* (*A. Haagi*, mihi *i. l.*), which still more closely approximates this genus to *Chorasmius*, and, through the latter, to *Evaniosomus*.

I think it will be found that Lacordaire throughout his work has attached too much value to the relative length of the metasternum as a character in classification; certainly, to remove *Aryenis* from close proximity to *Evaniosomus* would be a violent severance of very natural affinities.

ANCYLOPOMA, Pascoe, Ann. Mag. Nat. Hist., 1871, p. 354.

This genus must be referred to the *Heterotarsides* of Lacordaire; it should be placed after *Anædus*, Blanch.

ACANTHOSTERNUS, Montrouz., = *Diphyrrhynchus*, Fairmaire.

This opinion, however, is dependent on the genuineness of so-called types I had from the collection of Doué.

Aniara (Dej.) Lacord., = *Cenoscelis*, Wollaston, *Aniarus*, Gemminger, *Holaniara*, Fairmaire, = Eutochia, Le Conte.

This genus of *Ulomides* was first briefly characterized by Lacordaire (Genera, v, p. 336, note [1859]) under the name given by Dejean. This name being already in use, Le Conte, in his Classif. Col. N. Amer., p. 238 (1862), substituted that of *Eutochia*. Wollaston, in his Col. Hesp., p. 179 (1867), described his genus *Cenoscelis*,* which he doubtfully referred to the tribe *Pedinides* (group *Platyscelides*) of Lacordaire. Gemminger, in his great Catalogue, alters Lacordaire's name into *Aniarus:* and, lastly, Fairmaire, in the Ann. Fr. 1871, p. 43, apparently not knowing what had been done before him, gives the name of *Holaniara* to the genus.

Onosterrhus, Pascoe, Journ. Entom., ii, p. 451.

This genus, referred by its author to the *Pedinides*, must be removed to the group *Nyctozoilides* of Lacordaire. I possess an undescribed genus (*Hypocilibe*, mihi *i. l.*) from Australia, which clearly associates Pascoe's genus with *Nyctozoilus*, Guérin. This is another of the many instances in which apparently peculiar and isolated forms are brought into harmony by further discovery.

Trichosternum, Wollaston, = *Trichopodus*, Mulsant.

Exerestus, mihi, = *Rhinandrus*, Le Conte, teste Le Conte.

It is quite possible also that *E. Jansoni*, mihi, = *R. elongatus*, Horn.

Iphthimus cancellatus, Montrouz.

Belongs to the genus *Dechius*, Pascoe.

Nyctobates orcus, Pascoe.

Belongs to the genus *Hypaulax*, mihi.

Tenebrio Crotchi, Wollaston.

This is not a *Tenebrio*, but belongs to the *Ulomides*, and will form the type of a new genus (*Pelleas*, mihi *i. l.*), which should be placed, I think, near *Ulosonia*. It is the *Tenebrio parallelus* of Dej. Cat., p. 226.

Doliema, Pascoe, Journ. Entom., i, 1860, p. 50.

The *Adelina plana*,‡ Le Conte, of which I possess a type specimen, belongs to this genus, which must be placed near *Sitophagus*, Mulsant.

* The singular form of the last joint of the labial palpi in this genus is peculiar to the ♂; a similar peculiarity in this organ exists in the ♂ of the cognate genus *Oligocara*, Sol.—F. B.

‡ If it should be proved that Fabricius' species of the same name (Harold and Gemminger's Catalogue, p. 1987) is a *true Doliema*, then Le Conte's name will require changing.—F. B.

Sitophagus Solieri, Muls.

I have no doubt that this is identical with the *Hypogena complanata* of Dej. Cat. p. 220; and it is more than probable that the *Adelina farinaria* of Wollaston is also the same species.

Odontopus physodes and asperatus, Pascoe, Ann. Mag. of Nat. Hist., 1871, p. 355.

Both these species belong to Dr. Mäklin's genus *Aspidosternum*, a genus of *Strongyliides*. The *O. physodes* I more than suspect to be the same thing as the *Lagria æruginea* of Gerstäcker, Peters' Reise, 1862, p. 295, t. 17, fig. 9.

Odontopus speciosus, Pascoe, *l. c.*, p. 356, note, = *Aspidosternum cyaneum*, Mäklin.

Scotæus, Hope, and Eucyrtus, Pascoe.

Gemminger and v. Harold, in their Catalogue, have sunk the latter genus under the former, although the two are as distinct as well can be. It is difficult to conceive on what grounds these authors have, in this and a multitude of other cases, proceeded; it looks very like mere guess-work.

Adelium triste, Montrouz.

Is a species of *Arcothymus*, Pascoe.

Strongylium æneum and Mulsanti, Montrouz.

These will form a new genus very closely related to *Titæna*, Erichs.; they have no relation with *Strongylium*.

Strongylium viridipenne, Montrouz.

Is very near to, if not identical with, *Chariotheca*, Pascoe.

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INSTRUCTIONS FOR THE COLLECTION AND PRESERVATION OF NEUROPTEROUS INSECTS.

BY ROBERT M'LACHLAN, F.L.S.

The best aid and incentive to the study of any group of natural objects is the possession of a well-ordered collection, and any hints tendering to further this acquisition cannot but be of service. Taking this for granted, I propose to give here general instructions to those entomologists—few though they be—who turn their attention to that heterogeneous assemblage of insects known as the Linnean order